

## Vermont Mental Health Performance Indicator Project

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

### MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project  
Advisory Group and Interested Parties

FROM: John Pandiani and Monica Simon

DATE: September 19, 2003

RE: Arrests Rates and Change in Arrest Rates by Diagnosis

In response to PIPs that examined change in arrest rates for adults served by Vermont's community mental health programs ([www.state.vt.us/dmh/Data/PIPs/2003/pip052303.pdf](http://www.state.vt.us/dmh/Data/PIPs/2003/pip052303.pdf), [www.state.vt.us/dmh/Data/PIPs/2003/pip053003.pdf](http://www.state.vt.us/dmh/Data/PIPs/2003/pip053003.pdf)), Howard Dichter (Pennsylvania psychiatrist and consultant) raised a number of interesting questions about how clinical characteristics of clients and engagement in treatment might relate to levels of criminal justice involvement and change in criminal justice involvement for adults with serious mental illness. This week's PIP begins to address these issues by comparing arrest rates and change in arrest rates for two groups of CRT clients: those with a schizophrenia diagnoses and those without.

This analysis focuses on arrest rates for adults served by CRT programs in Vermont during 1999-2001. First, the analysis compares arrest rates for clients with a schizophrenia diagnosis with the arrest rates for clients who did not have a schizophrenia diagnosis. Second, the analysis compares change in arrest rates between the year before the treatment year and the year after the treatment year. Data used in this analysis were extracted from the DDMHS Monthly Service Report (MSR) database and Vermont State Police Incident Based Reporting System (VIBRS). Because these data sets do not share unique person identifiers, probabilistic population estimation was used to determine the number of CRT clients who were arrested during each of the two time periods under examination.

As you will see, there were statistically significant differences for five of our twelve demographic groups between arrest rates in the year prior to the treatment year for adults with a schizophrenia diagnosis and those without a schizophrenia diagnosis. Arrest rates for women with a schizophrenia diagnosis were lower than for women without this diagnosis overall and in the 35-49 year age group. Arrest rates for service recipients in the 50-64 year age group with a schizophrenia diagnosis were higher than for people in the same age group without this diagnosis as a whole, and for both men and women in this age group.

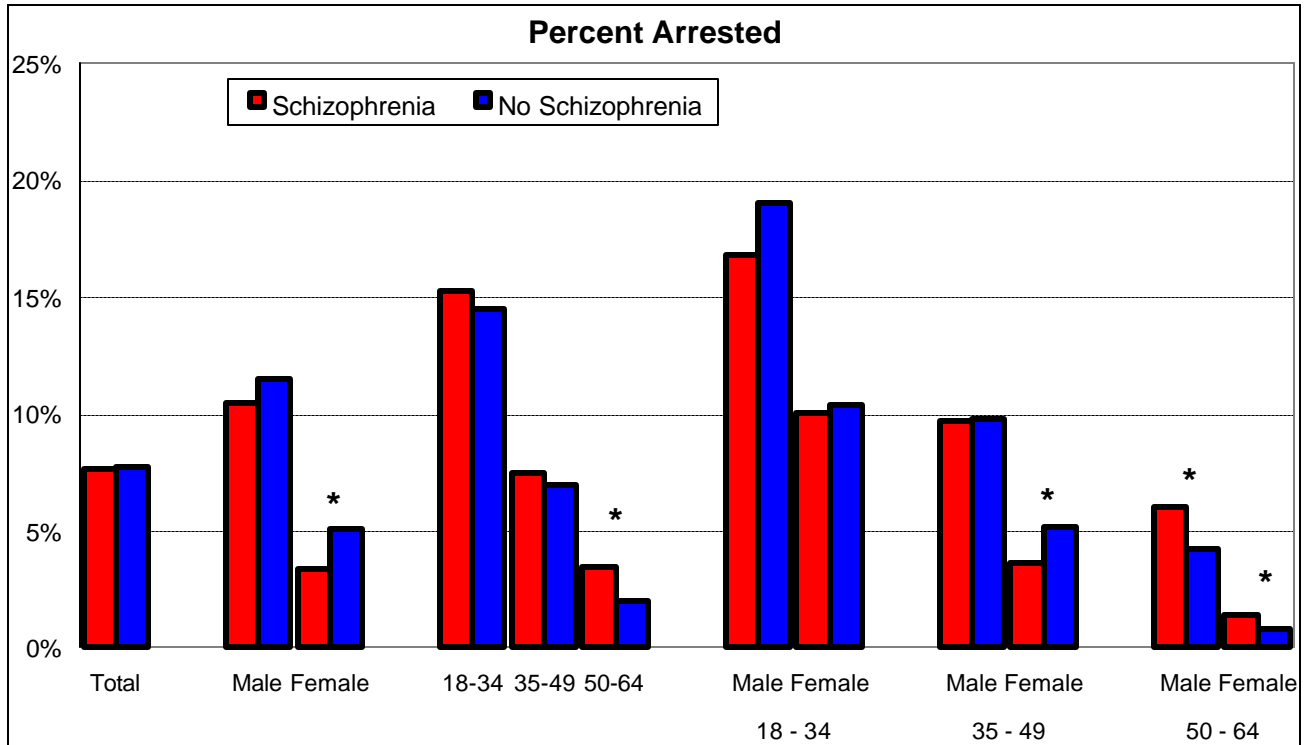
There were also differences in change in arrest rates between the year before the treatment year and the year after the treatment year for CRT clients with a schizophrenia diagnosis and those without a schizophrenia diagnosis. CRT clients with a schizophrenia diagnosis in six of our twelve demographic groups experienced statistically significant decreases in arrest rate

during the study period. This decrease was almost exclusively experienced by women. Decreased arrest rates were experienced by women overall and by women in each of our three age groups. Decreases were also experienced by men in the 50-64 age group and by individuals in the 18-64 age groups overall. Among CRT clients with no schizophrenia diagnosis, decreased arrest rates were observed for 18-34 year old men, and 18-34 year olds overall.

We look forward to your questions, comments and suggestions for further analysis to [pip@ddmhs.state.vt.us](mailto:pip@ddmhs.state.vt.us) or 802-241-2638.

## Arrest Rates

**FY1999 - FY2001 Community Rehabilitation and Treatment Clients**  
**By Schizophrenia Diagnosis, Age, and Gender**  
**Arrested During the Year Before the Treatment Year**



	Percent Arrested Before Treatment	
	Schizophrenia	No Schizophrenia
Total	7.6% ± 0.5%	7.7% ± 0.4%
Male	10.5% ± 0.8%	11.5% ± 0.8%
Female	3.3% ± 0.2%	5.1% ± 0.3%
18 - 34	15.3% ± 1.6%	14.5% ± 1.0%
35 - 49	7.5% ± 0.7%	7.0% ± 0.5%
50 - 64	3.5% ± 0.2%	2.0% ± 0.2%
18 - 34 Male	16.8% ± 2.1%	19.1% ± 2.0%
Female	10.1% ± 0.6%	10.4% ± 0.7%
35 - 49 Male	9.7% ± 1.1%	9.8% ± 1.1%
Female	3.6% ± 0.5%	5.2% ± 0.5%
50 - 64 Male	6.0% ± 0.5%	4.2% ± 0.5%
Female	1.4% ± 0.1%	0.8% ± 0.1%

\*Indicates difference is statistically significantly different at the 0.05 level of significance.

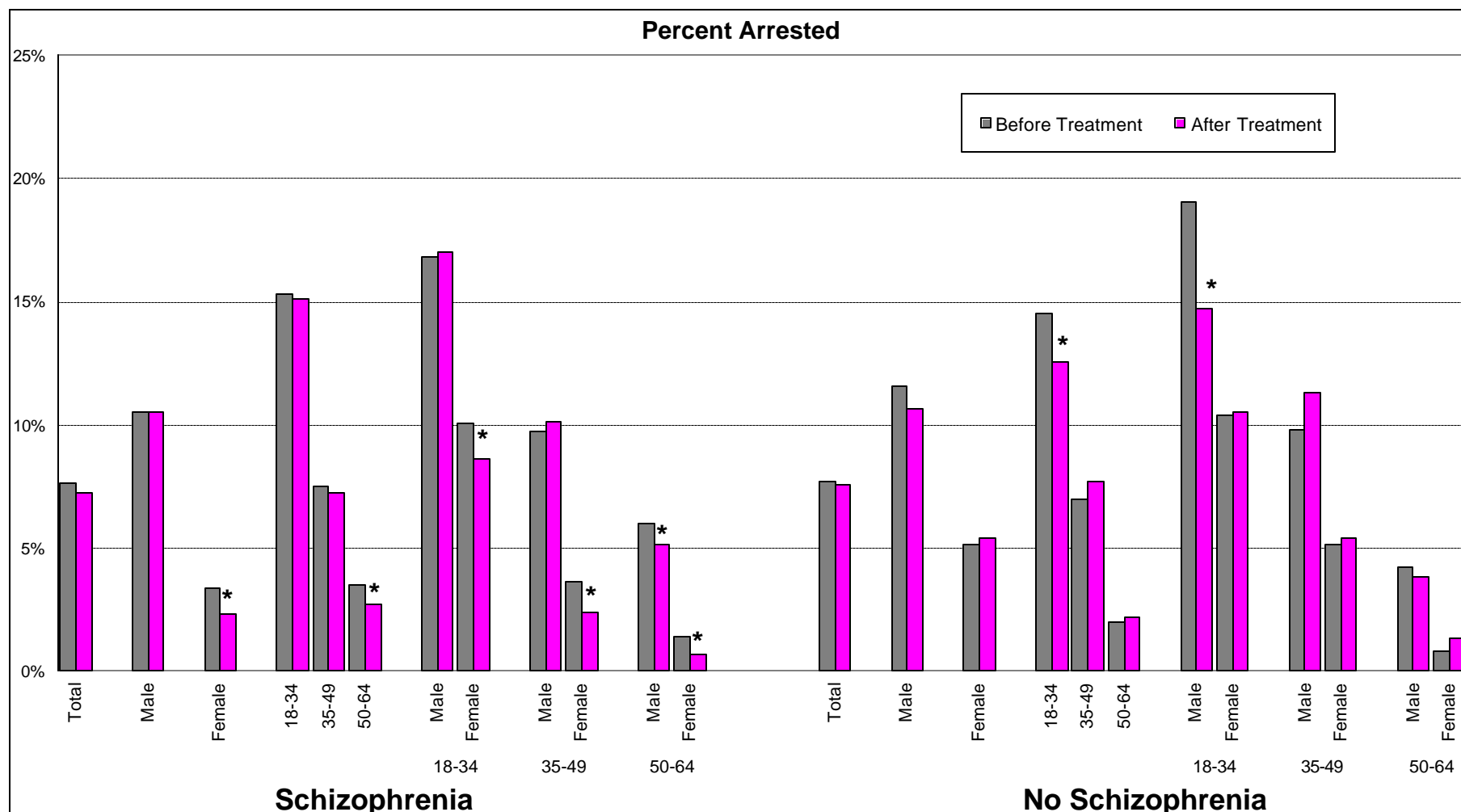
Analysis is based on data provided to DDMHS by community mental health centers and the Department of Public Safety. Analysis includes individuals served by Community Rehabilitation and Treatment Programs for adults with severe and persistent mental illness. Schizophrenia includes individuals who had a diagnosis of 295.xx. Because these databases do not share unique person identifiers, Probabilistic Population Estimation was used to determine the number of individuals shared across data sets (with 95% confidence intervals).

# Change in Arrest Rates

## FY1999 - FY2001 Community Rehabilitation and Treatment Clients

### By Schizophrenia Diagnosis, Age, and Gender

#### Change Between the Year Before and the Year After the Treatment Year



\*Indicates difference is statistically significantly different at the 0.05 level of significance.

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**Arrest Rates and Change in Arrest Rates**  
**FY1999 - FY2001 Community Rehabilitation and Treatment Clients**  
**By Schizophrenia Diagnosis, Age, and Gender**  
**Arrests the Year Before and the Year After the Treatment Year**

<b>Schizophrenia Diagnosis</b>				
	Average Number Served	Percent Arrested		Change Ratio
		Before Treatment	After Treatment	
Total	1,104 ± 3	7.6% ± 0.5%	7.2% ± 0.5%	0.95 ± 0.08
Male	665 ± 2	10.5% ± 0.8%	10.5% ± 0.7%	1.00 ± 0.10
Female	439 ± 2	3.3% ± 0.2%	2.3% ± 0.2%	0.69 ± 0.07 *
18 - 34	204 ± 1	15.3% ± 1.6%	15.1% ± 1.5%	0.99 ± 0.14
35 - 49	546 ± 2	7.5% ± 0.7%	7.2% ± 0.7%	0.97 ± 0.13
50 - 64	355 ± 2	3.5% ± 0.2%	2.7% ± 0.3%	0.78 ± 0.10 *
18 - 34 Male	157 + 1	16.8% + 2.1%	17.0% + 1.9%	1.01 + 0.17
Female	46 ± 0	10.1% ± 0.6%	8.6% ± 0.6%	0.85 ± 0.08 *
35 - 49 Male	345 + 2	9.7% + 1.1%	10.1% + 1.1%	1.04 + 0.16
Female	201 ± 1	3.6% ± 0.5%	2.4% ± 0.3%	0.65 ± 0.13 *
50 - 64 Male	163 ± 1	6.0% ± 0.5%	5.1% ± 0.6%	0.85 ± 0.12 *
Female	192 ± 1	1.4% ± 0.1%	0.7% ± 0.1%	0.49 ± 0.10 *

<b>No Schizophrenia Diagnosis</b>				
	Average Number Served	Percent Arrested		Change Ratio
		Before Treatment	After Treatment	
Total	1,673 ± 4	7.7% ± 0.4%	7.5% ± 0.4%	0.98 ± 0.07
Male	675 + 2	11.5% + 0.8%	10.7% + 0.8%	0.92 + 0.10
Female	997 ± 3	5.1% ± 0.3%	5.4% ± 0.3%	1.06 ± 0.08
18 - 34	464 ± 2	14.5% ± 1.0%	12.5% ± 1.0%	0.86 ± 0.09 *
35 - 49	754 + 3	7.0% + 0.5%	7.7% + 0.5%	1.10 + 0.11
50 - 64	455 ± 2	2.0% ± 0.2%	2.2% ± 0.2%	1.10 ± 0.16
18 - 34 Male	220 ± 1	19.1% ± 2.0%	14.7% ± 1.9%	0.77 ± 0.13 *
Female	243 + 1.3	10.4% + 0.7%	10.5% + 0.7%	1.01 + 0.10
35 - 49 Male	297 ± 2	9.8% ± 1.1%	11.3% ± 1.1%	1.15 ± 0.17
Female	457 ± 2	5.2% ± 0.5%	5.4% ± 0.5%	1.04 ± 0.14
50 - 64 Male	158 ± 1	4.2% ± 0.5%	3.8% ± 0.5%	0.90 ± 0.17
Female	297 ± 2	0.8% ± 0.1%	1.3% ± 0.2%	1.69 ± 0.30

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